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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,504

08/18/2003

Naoki Matsuhira

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EXAMINER

HOMAYOUNMEHR, FARID

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/642,504	Applicant(s) MATSUHIRA, NAOKI	
	Examiner FARID HOMAYOUNMEHR	Art Unit 2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/17/2009 has been entered.

2. This action is responsive to communications: application, filed 8/18/2003; amendment filed 8/9/2010.

3. Claims 8-10 are pending in the case.

4. Claims 1-7, and 11-14 are cancelled by the applicant.

Response to Arguments

5. Applicant's argument regarding prior art rejection is not persuasive. Applicant argues:

“The Action appears to be interpreting the "control information" discussed in the above text as equivalent to the "specific value" of claim 8. It is submitted that these are not equivalent. The control information is priority control information that, as is stated, is used to determine a priority level. In contrast, as stated by claim 8 the specific value is for "showing a VoIP performing a VoIP communication". For this reason, withdrawal of the rejection of claim 8 is requested. “

However Christensen at col. 10 states:

“In one embodiment of the invention, the operating parameter may be determined by receiving a packet with an operating parameter identifier. If there is no operating parameter identifier, an operating parameter may be inferred using one or more rules or heuristics as discussed above. The operating parameter identifier may be retrieved from the packet. In one embodiment of the invention, the operating parameter identifier may represent a priority level. More particularly, the operating parameter identifier may be one of a group comprising a DSCP, an RTP identifier, a VOIP identifier and a voice information identifier. The term "voice information identifier" as used herein may refer to any explicit identification that a packet may carry voice and/or video information.”

Therefore, Christensen clearly and explicitly teaches using a VoIP identifier.

Art Unit: 2434

Applicant also argues:

“As noted above, the Action appears to be interpreting the control information as equivalent to the specific value. However, the Action also appears to be interpreting the operating parameter identifier, particularly the operating parameter identifier being one of several in a group including the VOIP identifier in the above text, as equivalent to the specific value of claim 8. Clarification of what is being alledged as equivalent is requested.”

In response to applicant's request for clarification, examiner notes that the operating parameter is equivalent specific value. As indicated in col. 10 noted above, the operating value may be a VOIP identifier.

Accordingly, applicant's argument is found non-persuasive.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrow et al. (US Patent No. 6'154'839, dated Nov. 28, 2000) in view of Christensen (US Patent No. 7'292'530, filed Dec. 29, 2000), hereinafter called Chris.

7.1. As per claims 8-10, Arrow is directed to a packet filtering method characterized by storing filtering information for use in filtering at a receiving side in an encrypted packet to be sent to the receiving side and sending it from a sending side (col. 6 lines 46-60 shows the encryption and authentication information is added to a packet at sending side, and verified at the receiving side. In addition, col. 12 lines 35-46 show that packets are decrypted after they are authenticated, and therefore, it shows packets were encrypted. Also Arrow teaches that if the packets are not authenticated they are filtered out), wherein an Ipv6 extended header added to an Ipv6 header or in a flow label region in an Ipv6 header is used to transmit the filtering information as to prevent the filtering information from being encrypted, when the packet is a packet in compliance with Ipv6 (Fig. 8 and associated text shows the filtering data is placed in the address field of a packet. Arrow Fig 9 and associated text shows that user ID information, which is used for authentication (filtering) is put in the header of a packet. Address field of packets, such as IP packets are in the packet header. Column 6 lines 21-35 teach IP packets as examples for implementation of invention. It also explicitly teaches to use the technique regardless of the current version of IP protocol (col. 6 lines 30-35), which was Ipv6 at the time of invention. Ipv6 was well known at the time of invention. Therefore, Arrow teaches putting filtering information in a header of a packet

Art Unit: 2434

and also suggests using IP packets for implementation. Therefore, Arrow makes it obvious to put the filtering information in the header of an Ipv6 packet header. Also, as mentioned above, Arrow teaches authenticating the packet before decrypting it. Therefore, the authentication information (filtering info) was not encrypted);

said filtering information is used to identifying a specific value showing a VoIP performing a VoIP communication (Arrow does not explicitly teach said filtering information is used to identifying a specific value showing a VoIP performing a VoIP communication. Chris is directed to a method of improving network performance by recognizing high priority packets from information in the packet header, and process high priority packets accordingly. In particular, Chris col. 8 lines 25 to 43 shows VoIP packets are recognized (filtered) from header information and given higher priority. Also, Chris col. 10 line 63 to col. 11 line 10 shows that the operating parameter in the header is a VoIP identifier. Therefore, Chris teaches filtering information is used to identifying a specific value showing a VoIP performing a VoIP communication, and uses this information to prioritize the service. At the time of invention, it would have been obvious to the one skilled in art to enhance Arrows system which stores filtering information in the header of an encrypted packet by including filtering information to filter VoIP packets as taught by Chris. The motivation to do so, is as stated by Chris (e.g. abstract) would be to enhance the quality of service of the network by prioritizing more sensitive packets such as VoIP packets.);

Art Unit: 2434

and the specific value showing the VoIP provides a first function of the filtering and a second function of having a communication partner recognize the VoIP, simultaneously (As discussed above, and in col. 7 lines 9-30, Arrow teaches a filtering system that filters packets based on specific values in the packet headers. The combination of Arrow and Christensen makes it obvious to filter VoIP packets based on a specific VoIP identifier in the packet header. Christensen teaches using that specific VoIP parameter to set the operational parameters, and therefore recognize the VoIP communication. Therefore, Arrow in view of Christensen makes it obvious to use the VoIP identifier to do both the filtering function and having a communication partner recognize the VoIP, simultaneously). Note that per col. 12 lines 20-35, the user is authenticated in advance and have received proper authentication information to include in the packet user ID field. This authentication information is used by the firewall to authenticate user's packet. Note also that the functionality and hardware required to hold the filter keys and storing them is inherent to Arrow's system. Also note that Arrow col. 7 lines 40-55 teach that the equipment is provided with a buffer for temporarily storing a received packet passing through the filter key detecting unit and in that the comparing function unit is comprised of a filter key table holding a predetermined plurality of different filter keys.

[Claims 2, 4, 5, 12 and 13 are cancelled. The associated rejection is reproduced for the record:

Art Unit: 2434

7.2. As per cancelled claim 2, Arrow in view of Chris is directed to a packet filtering method characterized by, receiving an encrypted packet at the receiving side, from a sending side, detecting filtering information stored in that packet (see response to claim 1), holding predetermined filtering information of the receiving side, comparing filtering information of the sending side detected from the packet with the filtering information of the receiving side, and, when the two do not match, discarding that packet (for example, col. 8, lines 4-23, or col. 6, lines 45-60), wherein an Ipv6 extended header added to an Ipv6 header or in a flow label region in an Ipv6 header, is used to transmit the filtering information so as to prevent encrypting the filtering information when the packet is a packet in compliance with Ipv6, wherein said filtering information is used to identify a specific value showing a VoIP performing VoIP communication (see response to claim 1).

7.3. As per cancelled claim 4, limitations of claim 4 are substantially the same as claim 1, and note that the comparing function unit is equivalent to the authenticating unit of Arrow as shown in col. 12 line 21-34.

7.4. As per canceled claim 5, Arrow in view of Chris is directed to a communication equipment as set forth in claim 4, characterized in that: the equipment is provided with a buffer for temporarily storing a received packet passing through the filter key detecting unit and in that the comparing function unit is comprised of: a filter key table holding a predetermined plurality of different filter keys (col. 7, lines 40-55), a search unit for

Art Unit: 2434

searching if there is a filter key matching with a filter key detected by the filter key detecting unit in the filter key table and when there is none, outputting a discard command, and a buffer control unit for receiving the discard command and controlling the system so as to discard the packet stored in the buffer (see response to claim 3).

7.5 As per cancelled claim 12, Arrow in view of Chris is directed to a communication equipment as set forth in claim 4, wherein an authentication apparatus is further included, the authentication apparatus having: a filtering authentication function unit for receiving user authentication information input from a user receiving a filtering service and authenticating the user (Arrow col. 7 lines 30-40); and a filter key providing function unit for assigning and distributing said filter key to be stored in a packet corresponding to the user authentication information to the user after the authentication at the filtering authentication function unit (Arrow's claim 4 and also see Fig. 9 and associated text).

7.6. As per cancelled claim 13, Arrow in view of Chris is directed to a communication equipment as set forth in claim 12, wherein said filtering authentication function unit has: a user authentication database in which user authentication information is registered in advance, and a decision unit for determining the veracity of the input user authentication information by referring to the user authentication database; and said filter key providing function unit has: a filter key assigning table holding said filter key assigned in advance corresponding to user authentication information, and a filter key sending unit for sending a corresponding filter key from the filter key assigning table to

Art Unit: 2434

the user when the veracity is confirmed (Arrow col. 12 line 2 to 63 shows an embodiment where the authentication data is readily stored in the Address Translation Unit, where the data is used to authenticate the user (Also see Arrow claim 4). Arrow Fig 4 and 5 show use of a database to store information processed by the system, and a command module for executing commands received. A database stored information in tables, and once queried for a data item searches the tables for a match and provides the queried information. Note that to perform authentication, the authentication information must be stored and made available to the authenticating system).]

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farid Homayounmehr whose telephone number is 571 272 3739. The examiner can normally be reached on 9 hrs Mon-Fri, off Monday biweekly.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

Art Unit: 2434

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Farid Homayounmehr/

Primary Examiner

Art Unit: 2434